influx of air between the two portions of the fan cowl, in the direction **43.**

The four screw jacks **31** are of the recirculating ball type and driven by a flexible drive arranged as shown in FIG. **5.** An air motor **51** drives the jacks through a cable (not shown) running in a conduit **52** situated in the fixed portion of the fan cowl **24.** The air motor is conveniently housed in the space provided by the forward end of the pylon **12** and the fillet fairings **53.**

Screw jacks are preferred to hydraulic ones as they are easier to synchronise and the arrangement shown provides that in the event of one of the jacks failing the remaining jacks will still operate effectively.

In FIG. **6** a section through the guide rail **19** which guides the movement of the annulus **20** of the fan cowl may be seen. The pylon **12** and the associated fillet fairing **53** enclose the guide rail which comprises two guides **54, 55** lying parallel to the axis of the duct and connected to the pylon and each other by tie pieces **56** disposed at intervals along the length of the guides. Because of the pressure differential between the inside and outside of the duct there is a hoop stress set up in the fan cowl and this stress is transmitted round the circumference of the fan cowl via the tie pieces **56.** In addition to the circumferential seal **56** which prevents gas leakage through the joint between the two portions of the fan cowl, it is necessary to prevent gas leakage between the fan cowl and the guide rail. FIG. **7** illustrates how this is done.

There are two possible paths by which gas from the duct can escape past the guide rails.

The first path is between the pylon **59** that supports the core engine and the guide rail **55** and this may be simply prevented by raising a flange **61** on the guide **55** and a flange **62** on the pylon and interposing a resilient sealing member **63,** for example a cylindrical rubber strip, between the two flanges.

The second possible path is around the tee piece **58** that engages the guide **55.** This leakage may be stopped by lining the guide with a resilient layer **64,** of, for example, polytetraflouroethylene. As the guide not only guides the movement of the part **20** but also supports its weight the tee piece **58** will tend to tip in a clockwise direction and two line seals will be formed between the tee piece and the resilient layer at **65** and **66.** Polytetraflouroethylene is the preferred material as its lubricating properties aid the translation of the portion of the fan cowl.

An alternative embodiment of the invention is illustrated in FIGS. **8, 9, 10** each of which show a half section through a fan cowl. This fan cowl comprises first and second axially movable annular portions **70, 71** arranged so that in a first position the two movable portions are in close contact with a third fixed portion **72.** When extra nozzle area is required for take off then the part **71** is translated rearwards to a second position in which air flowing down the duct **18** may flow through the opening **78** in the fan cowl and over its outer surface **73** as indicated by the arrow **74.** For reversed thrust conditions, in which the direction of flow down the duct as represented by the arrow **75** is reversed, the portions **70** and **71** are moved together to a third position in which they define an opening **76.** Air may flow in the direction of the arrows **77** through this opening thus providing additional intake area. The shape of the surfaces defining this opening are such as to promote attachment of flow to the interior surface of the fixed portion of the fan cowl. It will be appreciated that the guide rails, drives, and sealing arrangements as described in relation to the first embodiment may readily be applied to this embodiment.

It is not strictly necessary that a complete annular part of the fan cowl should be translated rearwards but this is preferred as it results in a lighter structure.

What I claim is:

1. A nozzle for a ducted fan gas turbine engine having fan cowl means defining the nozzle area, means for relatively axially separating an upstream portion and a downstream portion of the fan cowl means to define an opening therebetween, means for directing a portion of the nozzle flow through said opening and for promoting attachment of the nozzle flow to the outer surface of the said downstream portion.

2. A nozzle for a gas turbine engine according to claim **1** and wherein the said ducted fan engine comprises a variable pitch fan engine.

3. A nozzle for a gas turbine engine according to claim **2** and wherein the said opening in the fan cowl means defines intake means for reversed thrust operation of the fan.

4. A nozzle for a gas turbine engine according to claim **3** wherein the size of said opening when operating as a nozzle differs from the size of said opening when defining intake means for reversed thrust operation of the fan.

5. A nozzle according to claim **1** and comprising guide rail means for supporting one of said upstream or downstream portions for movement relative to the other of said portions.

6. A nozzle according to claim **1** and comprising recirculating ball jack means for separating the said upstream and downstream portions.

7. A nozzle according to claim **1** and including sealing means between the said axially relatively separable portions.

8. A nozzle for a variable pitch fan engine comprising a fan cowl which together with a core engine defines the nozzle area, the fan cowl having an upstream portion and first and second downstream portions characterised in that there is provided means for relatively axially separating the second downstream portion from the upstream and first downstream portion to provide additional nozzle area and means for separating the first and second downstream portions from the upstream portion to define an opening, the opening defining intake means for reversed thrust operation of the fan.

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